REMARKS

The examiner's action mailed on September 19, 2007, has been received and its contents carefully considered. The specification and claims 1, 2, 8 and 13 have been amended. Reconsideration and reexamination of the amended application respectfully are requested.

OBJECTIONS OF DRAWINGS

The Examiner objected to the drawings because a reference character "310" illustrated in Fig. 6 is not mentioned in the specification. The specification has been amended at page 7, line 24, to associate the character B described there with the reference character 310. The objection therefore is no longer applicable and accordingly should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §§102 & 103

For at least the following reasons, it is submitted that this application is in condition for allowance.

Claims 1 and 8 were rejected under 35 U.S.C. §102(b) as being anticipated by *Ma et al.* (US 6,082,619). Claim 1 has been amended to clarify its intended meaning, that the method includes "detecting a plurality of edge areas on an image, each of the edge areas having an edge," "calculating a plurality of gradient angles of the edge area, and determining a predominant angle from among the calculated gradient angles", and "rotating the image according to the predominant gradient angle, wherein the edge represents that the maximum display difference in each of the edge areas is larger than a threshold."

As the original specification describes,

> To solve this problem [the problem of skew images using a copier or scanner], the key point is how to acquire the precise skew angle. Generally, the characteristics of a scanned image depend on the fundamental elements in a document, such as characters, pictures and tables. Elements available in a document are usually arranged in transverse or lengthwise directions. Most of prior arts obtain the skew angles in accordance with the variations of elements arrangement in transverse or lengthwise directions. However, such methods fail to attain the accurate skew angle due to completely detecting through the whole medium, or every pixel in a predetermined area thereon. Too many variations cause serious interferences while considering all the pixels. Consequently, the calculating result is still an incorrect skew angle, from which another skew image is derived. (page 1, lines 10-19).

In accordance with an embodiment of the invention as summarized in the specification, a skew angle determined with high accuracy by first detecting all the pixels on an image through the blocks with N*N pixels, and by finding out the edge areas with the edges. Next, the gradient angles of all the edge areas are calculated and the weighting thereof are added up to attain the precise skew angle according to the gradient angle with the highest weighting. That is, a plurality of gradient angles of the edge areas are calculated, and a predominant angle is determined from among the calculated gradient angles. In this regard, it is noted that the change in language was with reviewed by the Examiner following a telephone conference with the undersigned, and the Examiner stated in a reply email that for the purposes of additional clarity, it would be acceptable to use the suggested phrase if defined as meaning "gradient angle with the highest weighting." The specification has been so amended.

Such a process as defined by the amended claim 1 is nowhere shown or suggested or is otherwise obvious from the teachings of *Ma et. al.* Referring to column 4, lines 64-67, *Ma et al.* discloses that "[p]reliminary skew angles are calculated for each of the plurality of horizontal and/or vertical regions, and the skew angle is selected by a voting scheme from the preliminary skew angles, e.g., the median value is selected." Referring to column 15, lines 9-14, *Ma et al.* also discloses that "the median value is used because it provides the least overhead in

terms of processing speed. Other methods of determining the skew angle include using the most frequently occurring skew angle (i.e., majority voting) or more complex weighting techniques (i.e., weighted vote)." *Ma et al.* further discloses at column 15, lines 37-38, that "[o]nce the skew angle is estimated, the candidate region is deskewed".

From the above and a careful reading of the entire *Ma et al.* disclosure, it can be seem that the reference does not disclose to "calculate the gradient angles of all the edge areas to add up the weightings attain the precise skew angle according to the gradient angle with the highest weighting" as stated in original claim 1, or as restated in the amended claim "calculating a plurality of gradient angles of the edge areas, and determining a predominant angle from among the calculated gradient angles.

In fact, please refer column 12, lines 39-42, "The skew estimation method of . . .[*Ma et al.*] is also based on the ***Hough Transform method***, with two significant changes to make the method more practical and reliable." That is, *Ma et al.* disclosed a Hough transform method, not "calculating a plurality of gradient angles of the edge areas, and determining a predominant angle from among the calculated gradient angles."

Accordingly, it is respectfully submitted that the method of independent claim 1 as well as that of dependent claim 8, are neither taught nor suggested by the prior art cited by the Examiner.

The Examiner also rejected the remaining dependent claim under 35 USC 103(a) as being unpatentable over *Ma et al.* in combination with respective secondary references cited for their alleged teaching of the features introduced in the dependent claims. However, none of these secondary references show or suggest or otherwise make obvious when taken with *Ma et al.*, the features of the invention claimed in claim 1 from which the dependent claims depend. Therefore, for at least the reasons advanced above as to the patentability of claim 1, dependent claims 2-7 and 9-13 also are deemed clearly to be patentable over the cited references. Reconsideration and withdrawal of the 35 USC §§102 and 103 rejections respectfully are requested.

Based on the above, it is submitted that the application is in condition for allowance and such a Notice, with allowed claims 1-13, earnestly is solicited.

Should the Examiner feel that a conference would help to expedite the prosecution of this application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

No fee is believed due. Should any fee be required, however, the Commissioner is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,

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Date

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